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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/808,067	03/24/2004	Toshio Mikiya	10210/10	4195

7590 06/16/2006  
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P.O. Box 10395  
Chicago, IL 60610

EXAMINER

DUNWOODY, AARON M

ART UNIT	PAPER NUMBER
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3679

DATE MAILED: 06/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/808,067

Applicant(s)

MIKIYA ET AL.

Examiner

Aaron M. Dunwoody

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 28 March 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) 3 and 11 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,4-10 and 12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Specification***

The incorporation of essential material in the specification by reference to an unpublished U.S. application, foreign application or patent, or to a publication is improper. Applicant is required to amend the disclosure to include the material incorporated by reference, if the material is relied upon to overcome any objection, rejection, or other requirement imposed by the Office. The amendment must be accompanied by a statement executed by the applicant, or a practitioner representing the applicant, stating that the material being inserted is the material previously incorporated by reference and that the amendment contains no new matter. 37 CFR 1.57(f).

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, 4, 5 and 7-10 are rejected under 35 U.S.C. 102(b) as being anticipated by US patent 4592387, Rogers.

In regards to claim 1, in Figures 2-5, Rogers discloses a female coupler adapted to be connected to a male coupler comprising:

a coupler body having a cylindrical male coupler receiving portion for receiving a male coupler therein, and a fluid passage to be fluidly communicated with a fluid

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passage of the male coupler which has been received in the cylindrical male coupler receiving portion, the cylindrical male coupler receiving portion having a radial hole radially extending therethrough;

a locking member disposed in the radial hole and movable between

an engagement position wherein the locking member engages with a locking member receiving recess formed on the outer surface of the male coupler which has been inserted into the cylindrical male coupler receiving portion to thereby prevent the male coupler from being disengaged or moving out from the cylindrical male coupler receiving portion, and

a disengagement position wherein the locking member is positioned radially outwardly relative to the engagement position and disengages from the locking member receiving recess of the male coupler to thereby allow the male coupler to move out from the cylindrical male coupler receiving portion;

an outer movable member mounted on the cylindrical male coupler receiving portion, the outer movable member being axially movable between

a locking position wherein the outer movable member urges the locking member to the engagement position, and

an unlocking position wherein the outer movable member allows the locking member to move to the disengagement position; and,

a securing member for engaging with and securing the outer movable member to the unlocking position, the securing member being disengaged from the outer movable member to allow the outer movable member to move to the locking position when the

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locking member receiving recess has been moved to an axial position for receiving the locking member.

In regards to claim 2, in Figures 2-5, Rogers discloses an inner movable member disposed in the cylindrical male coupler receiving portion, the inner movable member being axially movable between an advanced position wherein the inner movable member engages with the locking member to hold the locking member in the disengagement position, and

a retracted position for allowing the locking member to move to the engagement position; and,

a first urging member for urging the inner movable member towards the advanced position;

the inner movable member being moved from the advanced position to the retracted position by the male coupler inserted into the cylindrical male coupler receiving portion and, when the male coupler has been moved to a position wherein the locking member receiving recess thereof is located at an axial position for receiving the locking member, allowing the securing member to disengage from the outer movable member.

In regards to claim 4, in Figures 2-5, Rogers discloses an inner movable member disposed in the cylindrical male coupler receiving portion, the inner movable member being axially movable between a retracted position wherein the inner movable member has been moved rearwards by the male coupler which has been inserted into the cylindrical male coupler receiving portion so that the locking member receiving recess

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thereof has been moved to an axial position for receiving the locking member therein;  
and,

an advanced position closer to the locking member than the retracted position;  
a first urging member for urging the inner movable member towards the  
advanced position;

the inner movable member urging the securing member radially outwards to  
make the securing member securely engaged with the outer movable member at the  
unlocking position, and allowing the outer movable member to move to the locking  
position when the inner movable member has been moved rearwards a predetermined  
distance from the advanced position.

In regards to claim 5, in Figures 2-5, Rogers discloses the cylindrical male  
coupler receiving portion is engaged by and prevented by the male coupler from  
effecting a further advancement when the male coupler has been received into the  
cylindrical male coupler receiving portion upon advancement of the female coupler  
towards the male coupler so that the locking member receiving recess has been moved  
to an axial position for receiving the locking member; and

the female coupler further comprises a handle fixedly connected to the outer  
movable member, the handle enabling an operator to hold the female coupler by  
grasping the handle for coupling the female coupler with the male coupler.

In regards to claim 7, in Figures 2-5, Rogers discloses a female coupler adapted  
to be connected to a male coupler comprising:

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a coupler body having a cylindrical male coupler receiving portion adapted to receive a male coupler therein, and a fluid passage to be fluidly communicated with a fluid passage of the male coupler which has been received in the cylindrical male coupler receiving portion, the cylindrical male coupler receiving portion having a radial hole;

a locking member disposed in the radial hole and movable between an engagement position wherein the locking member engages with a locking member receiving recess formed on the outer surface of the male coupler which has been inserted into the cylindrical male coupler receiving portion to thereby prevent the male coupler from being disengaged or moving out from the cylindrical male coupler receiving portion, and

a disengagement position wherein the locking member is positioned radially outwardly relative to the engagement position and disengages from the locking member receiving recess of the male coupler to thereby allow the male coupler to move out from the cylindrical male coupler receiving portion;

an outer movable member mounted on the cylindrical male coupler receiving portion, the outer movable member being axially movable between

a locking position wherein the outer movable member urges the locking member to the engagement position, and

an unlocking position wherein the outer movable member allows the locking member to move to the disengagement position;

a handle fixedly connected to the outer movable member, the handle enabling an operator to hold the female coupler by grasping the handle for coupling the female coupler with the male coupler; and,

a holding member for engaging with and holding the outer movable member to the unlocking position, the holding member being disengaged from the outer movable member to allow the outer movable member to move to the locking position when the male coupler has been inserted into the cylindrical male coupler receiving portion and reached a position wherein the locking member receiving recess is located at an axial position for receiving the locking member;

the cylindrical male coupler receiving portion being engaged by and prevented by the male coupler from effecting a further advancement when the male coupler has been inserted into the cylindrical male coupler receiving portion upon advancement of the female coupler towards the male coupler and reached a position wherein the locking member receiving recess is located at an axial position for receiving the locking member.

In regards to claim 8, in Figures 2-5, Rogers discloses an inner movable member disposed in the cylindrical male coupler receiving portion, the inner movable member being axially movable between an advanced position wherein the inner movable member engages with the locking member to hold the locking member in the disengagement position, and

a retracted position for allowing the locking member to move to the engagement position; and,



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a first urging member for urging the inner movable member towards the advanced position;

the locking member functioning as the holding member in such a manner that the locking member holds the outer movable member at the unlocking position when the locking member is located at the disengagement position and allows the outer movable member to the locking position when the locking member is located at the engagement position.

In regards to claim 9, in Figures 2-5, Rogers discloses the outer movable member is cylindrical and coaxial with the cylindrical male coupler receiving portion and has an interior surface slidably engaged with an exterior surface of the cylindrical male coupler receiving portion, the interior surface having a locking portion urging the locking member to the engagement position when the outer movable member is located at the locking position and a recess for receiving the locking member when the outer movable member is located at the unlocking position.

In regards to claim 10, in Figures 2-5, Rogers discloses: an inner movable member disposed in the cylindrical male coupler receiving portion, the inner movable member being axially movable between a retracted position wherein the inner movable member has been moved rearwards by the male coupler which has been inserted into the cylindrical male coupler receiving portion so that the locking member receiving recess thereof has been moved to an axial position for receiving the locking member therein; and,

an advanced position closer to the locking member than the retracted position;

a first urging member for urging the inner movable member towards the advanced position;

the inner movable member urging the securing member radially outwards to make the securing member engaged with and securing the outer movable member at the unlocking position, and allowing the outer movable member to move to the locking position when the inner movable member has been moved to the retracted position by the male coupler.

Claims 1, 2, 4-10 and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by US patent 4074698, Hobson et al.

In regards to claim 1, in Figures 1-4, Hobson et al disclose a female coupler adapted to be connected to a male coupler comprising:

a coupler body having a cylindrical male coupler receiving portion for receiving a male coupler therein, and a fluid passage to be fluidly communicated with a fluid passage of the male coupler which has been received in the cylindrical male coupler receiving portion, the cylindrical male coupler receiving portion having a radial hole radially extending therethrough;

a locking member disposed in the radial hole and movable between an engagement position wherein the locking member engages with a locking member receiving recess formed on the outer surface of the male coupler which has been inserted into the cylindrical male coupler receiving portion to thereby prevent the

male coupler from being disengaged or moving out from the cylindrical male coupler receiving portion, and

a disengagement position wherein the locking member is positioned radially outwardly relative to the engagement position and disengages from the locking member receiving recess of the male coupler to thereby allow the male coupler to move out from the cylindrical male coupler receiving portion;

an outer movable member mounted on the cylindrical male coupler receiving portion, the outer movable member being axially movable between

a locking position wherein the outer movable member urges the locking member to the engagement position, and

an unlocking position wherein the outer movable member allows the locking member to move to the disengagement position; and,

a securing member for engaging with and securing the outer movable member to the unlocking position, the securing member being disengaged from the outer movable member to allow the outer movable member to move to the locking position when the locking member receiving recess has been moved to an axial position for receiving the locking member.

In regards to claim 2, in Figures 1-4, Hobson et al disclose an inner movable member disposed in the cylindrical male coupler receiving portion, the inner movable member being axially movable between an advanced position wherein the inner movable member engages with the locking member to hold the locking member in the disengagement position, and

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a retracted position for allowing the locking member to move to the engagement position; and,

a first urging member for urging the inner movable member towards the advanced position;

the inner movable member being moved from the advanced position to the retracted position by the male coupler inserted into the cylindrical male coupler receiving portion and, when the male coupler has been moved to a position wherein the locking member receiving recess thereof is located at an axial position for receiving the locking member, allowing the securing member to disengage from the outer movable member.

In regards to claim 4, in Figures 1-4, Hobson et al disclose an inner movable member disposed in the cylindrical male coupler receiving portion, the inner movable member being axially movable between a retracted position wherein the inner movable member has been moved rearwards by the male coupler which has been inserted into the cylindrical male coupler receiving portion so that the locking member receiving recess thereof has been moved to an axial position for receiving the locking member therein; and,

an advanced position closer to the locking member than the retracted position;

a first urging member for urging the inner movable member towards the advanced position;

the inner movable member urging the securing member radially outwards to make the securing member securely engaged with the outer movable member at the

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unlocking position, and allowing the outer movable member to move to the locking position when the inner movable member has been moved rearwards a predetermined distance from the advanced position.

In regards to claim 5, in Figures 1-4, Hobson et al disclose the cylindrical male coupler receiving portion is engaged by and prevented by the male coupler from effecting a further advancement when the male coupler has been received into the cylindrical male coupler receiving portion upon advancement of the female coupler towards the male coupler so that the locking member receiving recess has been moved to an axial position for receiving the locking member; and

the female coupler further comprises a handle fixedly connected to the outer movable member, the handle enabling an operator to hold the female coupler by grasping the handle for coupling the female coupler with the male coupler.

In regards to claim 6, in Figures 1-4, Hobson et al disclose the handle comprises a pair of grip members, separated from each other in the transverse direction of the female coupler, positioned at the rearward of the female coupler and connected to opposite lateral sides of the outer movable member .

In regards to claim 7, in Figures 1-4, Hobson et al disclose a female coupler adapted to be connected to a male coupler comprising:

a coupler body having a cylindrical male coupler receiving portion adapted to receive a male coupler therein, and a fluid passage to be fluidly communicated with a fluid passage of the male coupler which has been received in the cylindrical male

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coupler receiving portion, the cylindrical male coupler receiving portion having a radial hole;

a locking member disposed in the radial hole and movable between

an engagement position wherein the locking member engages with a locking member receiving recess formed on the outer surface of the male coupler which has been inserted into the cylindrical male coupler receiving portion to thereby prevent the male coupler from being disengaged or moving out from the cylindrical male coupler receiving portion, and

a disengagement position wherein the locking member is positioned radially outwardly relative to the engagement position and disengages from the locking member receiving recess of the male coupler to thereby allow the male coupler to move out from the cylindrical male coupler receiving portion;

an outer movable member mounted on the cylindrical male coupler receiving portion, the outer movable member being axially movable between

a locking position wherein the outer movable member urges the locking member to the engagement position, and

an unlocking position wherein the outer movable member allows the locking member to move to the disengagement position;

a handle fixedly connected to the outer movable member, the handle enabling an operator to hold the female coupler by grasping the handle for coupling the female coupler with the male coupler; and,

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a holding member for engaging with and holding the outer movable member to the unlocking position, the holding member being disengaged from the outer movable member to allow the outer movable member to move to the locking position when the male coupler has been inserted into the cylindrical male coupler receiving portion and reached a position wherein the locking member receiving recess is located at an axial position for receiving the locking member;

the cylindrical male coupler receiving portion being engaged by and prevented by the male coupler from effecting a further advancement when the male coupler has been inserted into the cylindrical male coupler receiving portion upon advancement of the female coupler towards the male coupler and reached a position wherein the locking member receiving recess is located at an axial position for receiving the locking member.

In regards to claim 8, in Figures 1-4, Hobson et al disclose an inner movable member disposed in the cylindrical male coupler receiving portion, the inner movable member being axially movable between an advanced position wherein the inner movable member engages with the locking member to hold the locking member in the disengagement position, and

a retracted position for allowing the locking member to move to the engagement position; and,

a first urging member for urging the inner movable member towards the advanced position;

the locking member functioning as the holding member in such a manner that the locking member holds the outer movable member at the unlocking position when the locking member is located at the disengagement position and allows the outer movable member to the locking position when the locking member is located at the engagement position.

In regards to claim 9, in Figures 1-4, Hobson et al disclose the outer movable member is cylindrical and coaxial with the cylindrical male coupler receiving portion and has an interior surface slidably engaged with an exterior surface of the cylindrical male coupler receiving portion, the interior surface having a locking portion urging the locking member to the engagement position when the outer movable member is located at the locking position and a recess for receiving the locking member when the outer movable member is located at the unlocking position.

In regards to claim 10, in Figures 1-4, Rogers discloses: an inner movable member disposed in the cylindrical male coupler receiving portion, the inner movable member being axially movable between a retracted position wherein the inner movable member has been moved rearwards by the male coupler which has been inserted into the cylindrical male coupler receiving portion so that the locking member receiving recess thereof has been moved to an axial position for receiving the locking member therein; and,

an advanced position closer to the locking member than the retracted position;

a first urging member for urging the inner movable member towards the advanced position;



the inner movable member urging the securing member radially outwards to make the securing member engaged with and securing the outer movable member at the unlocking position, and allowing the outer movable member to move to the locking position when the inner movable member has been moved to the retracted position by the male coupler.

In regards to claim 12, in Figures 1-4, Hobson et al disclose the handle comprises a pair of grip members, separated from each other in the transverse direction of the female coupler, positioned at the rearward of the female coupler and connected to opposite lateral sides of the outer movable member.

### ***Response to Arguments***

Applicant's arguments filed 3/28/2006 have been fully considered but they are not persuasive.

Applicant argues that both Rogers and Hobson suffer from the problems as cited in the background of the present application. The Examiner neither agrees or disagrees. Whether or not both Rogers and Hobson suffer from the problems as cited in the background of the present application, both Rogers and Hobson meet the claim limitations of the instant application.

Applicant argues that both Rogers and Hobson fail to disclose the securing or holding member. The Examiner disagrees. In Figures 2-5 of Rogers and Figures 1-4 of Hobson, the securing or holding element is clearly illustrated.

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Applicant argues both Rogers and Hobson fail to disclose a handle fixedly connected to the outer movable member. The Examiner disagrees. Rogers discloses 46 and Hobson discloses 40 as a handle fixedly connected to the outer movable member.

***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

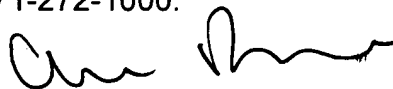
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aaron M. Dunwoody whose telephone number is 571-272-7080. The examiner can normally be reached on 7:30 am - 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel P. Stodola can be reached on 571-272-7087. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Aaron M Dunwoody  
Primary Examiner  
Art Unit 3679

.amd